CONSTRUCTION PLANNING AND PROGRESS MEETING

Brought to you by the Physical Plant Division

Thursday, August 9, 2012

Twitter hash tag #msuconstruction
Today’s Agenda

• Board of Trustee updates
• New presentations
  • Breslin Center — Berkowitz Basketball Complex Alterations
  • Steam Distribution – West Circle Steam Loop Segment 2 (2013)
  • Steam Distribution and Road Reconstruction – Bogue Street and Shaw Lane Intersection
  • Steam Repairs – Near Brody Complex over Labor Day weekend
  • Brody Complex – Utility Improvements Phase V
  • Jenison Fieldhouse – Parking Lot (No. 67) Reconstruction
• Project updates
  • Spartan Stadium – New Scoreboards and Sound System
  • Kellogg Center – Meeting Room Renovations
  • Steam Distribution – West Circle Steam Loop Segment 1 (2012)
  • Steam Distribution and Road Reconstruction – Chestnut Road near I.M. West Building
  • MSU Union – Renovations to First-Floor Lobby
  • Hannah Administration Building – North Entrance Renovation
Step 1: Authorization to Plan

- Duffy Daugherty Football – Filming Tower Football Practice Field
- Breslin – Berkowitz Basketball Renovations
- Spartan Stadium – Addition 5 North Endzone

Step 2: Authorization to Proceed

- Music Building – Replace Electrical Substation
- Butterfield Hall – Major Renovation
- Plant Biology – North Wing Lab Exhaust System
Step 1: Authorization to Plan

- Akers Hall – Consolidate Dining Hall and Sparty’s to Develop Restaurant Concept
- Union Building – North Neighborhood Engagement Center
- Michigan State Police Complex – Schematic Level Design
- Manly Miles – Replace Fan Coil Units and Upgrade

Step 2: Authorization to Proceed

- Duffy Daugherty Football – Filming Tower Football Practice Field
- Breslin Center – Berkowitz Basketball Alterations
- Steam Distribution – West Circle Steam Loop Segment 2 (2013)
- Steam and Road Construction – Bogue and Shaw Intersection
- Brody Complex – Utility Improvements Phase V
- Jenison Fieldhouse – Parking Lot (No. 67) Reconstruction
Project Area
**Arch Tunnels**

- Vault 92 to Vault 93 ([fig. 1.7](#))
  - Small tunnel 4’ wide x 5’ tall
  - Structural failure under road
    - No means of predicting performance
  - 1’ to 2’ cover over tunnel

Crack in North wall
Crack in South Wall
Arch Tunnels

- Vault 93 to IM Circle (fig. 1.8)
  - Deteriorating concrete
    - 25% section loss
  - 50% stanchions failed
    - Base rusted out, loose at ceiling
West Circle – Existing Road Configuration
Detailed Road and Pedestrian Walks
Proposed Tree Protection and Removal

Steam Distribution – West Circle Steam Loop Segment 2 (2013)
August 2012
Steam Distribution - Replace West Circle Steam Loop Segment 2 (2013)

In-Planning/Design
December 2011 - October 2012

Description: The north campus arch-style steam tunnels are 87 to 102 years old and have significantly deteriorated. The structural anchors, pipe supports and steam equipment within these tunnels are severely deteriorated and require replacement or repair for safe and reliable operation of the steam distribution system. The water main in this area is also at the end of its useful life and should be increased in size for effective fire-fighting capability and reliability. Communication lines are in the same tunnels as steam and condensate return lines, which is not optimal. The existing electrical duct bank is currently full and requires additional ducts to be installed for future electrical improvements to this region of campus.

This project is anticipated to be the second phase of a four-phase program to replace the deteriorating north campus arch steam tunnels, and is anticipated to include replacing the existing deteriorated arch steam tunnel from IM Circle to vault 92, north of the MSU Library, along with repair and replacement of steam piping, supports and equipment within some existing steam tunnels. The project is also anticipated to include replacing the deteriorated cast-iron water main with a larger pipe to increase fire-flow capacity and reliability. Additional communication and electrical duct will be installed, West Circle Drive will be reconstructed with two traffic lanes and a bike lane to be consistent with current MSU transportation standards, including pedestrian, bicycle and vehicular traffic flow and safety. On-street parking removal will be investigated.

The proposed project is located along Beal Street and West Circle Drive, between the MSU Library and IM Circle in the North Academic District.

Check out the video below to hear from some of the experts working on the project.
Steam Repairs Near Brody Complex over Labor Day weekend
August 2012

Project area
Steam Repairs Near Brody Complex over Labor Day weekend
August 2012
Steam Repairs Near Brody Complex over Labor Day weekend
August 2012
Failed structural anchor in vault 60
Land and sidewalk closures underway now
Steam Repairs Near Brody Complex over Labor Day weekend
August 2012

Shutdown impacts:

• **Duration:** 1 p.m., Sept. 2, to 5 a.m., Sept. 3

• **Brody Complex:**
  • no hot water
  • only basic cooking operations

• **Kellogg Center:**
  • no hot water
  • no cooling system
Steam Repairs - Near Brody Complex over Labor Day Weekend

In-Construction
August 2012 - September 2012

Description: The Brody Complex is located in the southwest corner of Michigan Avenue and Harrison Road in the residential district, and the work done during this project will be near Emmons Hall on Harrison Road. The utility distribution system in the Brody Complex is more than 50 years old and no longer able to provide reliable service. This project will prepare the vault 121 and vault 60 for utility improvements in the Brody Complex. An expansion will eventually be built on vault 121, and vault 60 will eventually be removed.

Part of this project includes turning off the steam and condensate systems from Sept. 2 (at 1 p.m.) to Sept. 3 (at 5 a.m.). This shutdowns will affect Brody Complex’s hot-water system and the Kellogg Center's hot-water and cooling systems.

Timeline: Construction is planned to begin in August 2012 and will end in September 2012.

Questions, comments, concerns?
Design representative: John LeFevre, jlefevre@pplant.msu.edu, 517-884-6740
Brody Complex – Utility Improvements Phase V
August 2012

Project area
Brody Complex – Utility Improvements Phase V
August 2012

**Brody Complex - Utility Improvements - Phase V**

**In-Planning/Design**

*October 2011 - October 2012*

**Description:** The utility distribution system in the Brody Complex is more than 50 years old and no longer able to provide reliable service. The direct-buried steam and condensate return lines (which are involved in heating and cooling campus buildings) from Brody Hall to Bailey Hall and Emmons Hall were installed in 1957 and have been repaired several times.

The Brody Complex is located in the southwest corner of Michigan Avenue and Harrison Road in the residential district. This project involves replacing the direct-buried steam and condensate return line from Brody Hall to Bailey Hall and Emmons Hall. Earlier phases have installed a new water main to the Brody Complex and the Kellogg Center, connecting these buildings to the City of East Lansing water supply.

**Timeline:** Construction is planned to begin in May 2012, with substantial completion in August 2012, and final completion by April 2014.

**Questions, comments, concerns?**

Design Representative: John LeFevre, jlefevre@ppplant.msu.edu, 517-884-6740
Separator drainage area map
Parking - Lot 67 (Jenison) - Reconstruction

In-Planning/Design
February 2012 - February 2013

Description: The parking lot for the Jenison Fieldhouse was built in 1940. Since its construction, it has not been modified, although a few repairs have been made to the road. The lot is located adjacent to the fieldhouse with entrances on Kalamazoo Street. The reconstruction will not change the configuration of the parking lot, although it will be tweaked to better suit event parking. There will be a new entrance to the lot, it will be farther down Kalamazoo Street than the current entrance.

All entrances to the Jenison Fieldhouse will remain open during the reconstruction of the lot.

Timeline: Construction for this project started in February 2012 and will continue into February 2013.

Questions, comments, concerns?
Design representative: Dennis Hansen, hansen@pplant.msu.edu, 517-353-9223
Stadium

Spartan Stadium – Replace Existing Scoreboards and Install Sound System
August 2012
Spartan Stadium – Replace Existing Scoreboards and Install Sound System
August 2012

Scoreboard at south entrance of Spartan Stadium
Spartan Stadium – Replace Existing Scoreboards and Install Sound System
August 2012

Scoreboard at south entrance of Spartan Stadium
Scoreboards at north entrance of Spartan Stadium
Northeast scoreboard
Northwest scoreboard
View of north end scoreboards and fascia from inside the stadium
View of northeast end scoreboard from inside the stadium
Spartan Stadium – Replace Existing Scoreboards and Install Sound System
August 2012

View of south scoreboard from the roof of the stadium
View of south scoreboard from inside the stadium
Spartan Stadium – Replace Existing Scoreboards and Install Sound System

August 2012

Spartan Stadium - Replace Existing Scoreboards and Sound System

In-Construction
March 2012 - August 2012

Description: The existing Spartan Stadium scoreboards, including video display and sound system, were installed in 1998. The technology these boards use has become outdated and more difficult to service, as parts are no longer being manufactured. The sound system, which is housed in the existing south scoreboard, also uses outdated technology that does not adequately service the facility. The outer skin of the south scoreboard continues to be problematic during high winds, requiring regular repair. These boards also lag behind other highly competitive Football Bowl Subdivision football stadiums. Contemporary scoreboards allow additional revenue opportunities, and are becoming the norm for Big Ten football stadiums.

Spartan Stadium is located between Shaw Lane, Chestnut Road and Red Cedar Road in the Athletic and Recreation District. This project involves replacing the existing scoreboards, including sound system and video display, with more energy-efficient technology. There will be two scoreboards located on the north end with a ribbon panel that spans the north end of the bowl and one larger scoreboard on the south end. The new scoreboards will include structural improvements.

Questions, comments, concerns?
Design Representative: Scott Gardner, mgardner@pplant.msu.edu, 517-432-0782
Construction Representative: Kevin Durkin, kdurkin@pplant.msu.edu, 517-432-2153
Big Ten Conference Room A
Big Ten Conference Rooms B and C
Main entrance into Big 10 Conference Room A
Lighting difference in Big 10 Conference Rooms B and C
Kellogg Center – Meeting Room Renovations
August 2012

Kellogg Center - Meeting Room Renovations

In-Construction
November 2011 - July 2012

Description: The Kellogg Hotel and Conference Center is located on the east side of Harrison Road between Kalamazoo Street and Michigan Avenue. The project will include renovations of the Big Ten rooms, other meeting rooms, break-out space, and related corridors and areas.

Upgrades will include improvements in the following areas:

- Air conditioning system
- Carpet
- Paint
- Furniture
- Wall and window treatments
- Ceiling
- Lighting
- Electrical system
- Building technology

Timeline: Renovations to the Big Ten rooms will begin May 23, 2012 and will be substantially complete by mid-July.

Questions, comments, concerns?

Design Representative: Jeff Kasdorf, kasdorf@pplant.msu.edu, 517-353-5141
Construction Representative: Kevin Durkin, kdurkin@pplant.msu.edu, 517-432-2153
Looking southwest at Music Building, contractors doing utility work
Looking east at Morrill Hall along West Circle Drive
Looking east at Eustace Cole Hall along West Circle Drive
Electricians drilling holes for light pole bases on East Circle Drive
Looking north at Olin Health Center, contractors pouring curb and gutter
Looking at Berkey Hall
Snow melt system going in at southwest corner of Berkey Hall
New communication vault near steam vault 110 (Eustace Cole Hall)
Direct-buried steam line going into Eustace Cole Hall
Maintaining existing utilities at steam vault 110
Birds eye view of the site taken July 11
Overhead view of site looking west taken July 11
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Steam Distribution - West Circle Steam Loop Segment 1 (2012)
August 2012

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Steam Distribution - West Circle Steam Loop

In Construction
February 2012 - December 2012

Description: The north campus arch-style steam tunnels are 67 to 102 years old and have significantly deteriorated. The structural anchors, pipe supports and steam equipment within these tunnels also require replacement or repair for safe and reliable operation of the steam distribution system.

This project is the first phase of a four-phase program to replace the deteriorating north campus arch steam tunnels, and will include installation of a new steam distribution loop around West Circle (from Landon Hall moving clockwise to a point east of Human Ecology). Repair and replacement of steam piping, supports and equipment within some existing steam tunnels will also be included. This will increase the reliability of the steam system and provide a mechanism to remove arch steam tunnel segments with minimum impact to campus building operations. During this construction, all of the buildings in the zone of influence will be converted to high-pressure steam and pressure-condensate return lines, improving energy efficiency. The deteriorated cast-iron water main will be replaced to increase fireflow capacity and reliability. Additional communication and electrical duct will be installed according to master plans. West Circle Drive will be replaced with two traffic lanes and one bike lane, providing appropriate vehicular, pedestrian and bicyclist safety improvements.
Project area

Steam and Road Reconstruction – Chestnut Road & Steam Tunnel to I.M. West Building
August 2012
Steam tunnel will run from Munn Ice Arena to IM West, but Munn loading dock will remain accessible. On-street parking will be removed and relocated, and bike lanes will be added. Construction from May 7 to August 17, 2012.
Project phases

Steam and Road Reconstruction – Chestnut Road & Steam Tunnel to I.M. West Building
August 2012
Looking north at Demonstration Hall; almost ready to be paved
Looking northeast along Chestnut Road
Trailer closed, utilize parking structure bridge. Access to sports fields will be maintained.

The southeast parking loop is under construction. Access the Munn Ice Arena loading dock from the north. Dock will be inaccessible 8/14-8/16.

Detour Legend
- CLOSED
- MOTORIST DETOURS
- PEDESTRIAN DETOURS
- BARRIER-FREE PARKING
- BUILDINGS
- ROADS
- PARKING LOTS
- WOODLOTS
Chestnut Road and New Steam Tunnel to IM West Building

In-Construction
May 2012 - August 2012

Description: The direct-buried steam and condensate lines in this area were installed in 1958. The lines have been repaired several times and continue to require attention, including the repair of leaks in the lines, valves and fittings. In addition, this segment of Chestnut Road and Demonstration Hall Road are deteriorating and are not configured to current MSU standards, including bike lanes.

This project is located southwest of the IM West Building, along Chestnut Road, in the athletic and recreation district. This project involves the replacement of the existing direct-buried steam and condensate return lines with new lines in a steam crawl tunnel, along with the reconstruction of Chestnut Road. Some on-street parking will be removed from Chestnut Road and bike lanes will be implemented. Demonstration Hall Road will have bike route signage. This project also includes sewer separation, storm water management improvements and water main improvements to the region.

Timeline: This project is scheduled to begin construction in May 2012, with substantial completion in December 2013.

Questions, comments, concerns?

Design Representative: Scott Gardner, mgardner@ppplant.msu.edu, 517-432-0782
Construction Representative: Andy Linebaugh, alinebau@ppplant.msu.edu, 517-432-7103
MSU Union – Renovations to First Floor Lobby
August 2012

SCHEMATIC DESIGN SCOPE

Base Project
• Help Desk
• Ramp and Stage between Large Lounge and Upper Circulation Corridor
• Update Interior Finishes – Large Lounge, Corridors
• Location for USPS Kiosk
• Location for Credit Union ATMs

Culinary Services
• Coffee Venue – “Vanilla Box Build-Out”
• C-Store Relocation
• Reface Food Service Venues (3) and Modify Circulation Pathways

LINE OF SECURED SPACE AFTER HOURS OF OPERATION
New walls are being built in the food service venue area.
Sparty’s Store area
The new coffee shop area
Large lounge area
Related Content
October 13, 2011
Meeting Minutes
Project Status
Planning/Design
Construction
Archived

MSU Union - Renovations to First Floor Lobby

In-Planning/Design
June 2011 -

Description: The MSU Union, a campus landmark, is prominently located along Grand River Avenue, adjacent to a main entrance of Michigan State University. Additions to the building were completed in 1936, 1949, 1980 and 1997, resulting in a total current area of 186,000 square feet. While there have been numerous programmatic changes over the years, the core "college union" philosophy of providing a hub for student activity has been maintained. Residential and Hospitality Services' Strategic Plan envisions continued vitality for the Union, but the building does not currently meet the needs of the primary audience of students and visitors.

It will include renovation of the first floor concourse, main lounge, and reconfiguration and renovation of retail outlets including the coffee shop and Sparty's Convenience Store. An information desk will be created at the intersection of the pedestrian flow and a new connection to the lower lounge from the upper lobby will be built to increase accessibility. The lounge and lobby will receive new finishes including flooring, carpet, paint, and furnishings. The One Union Square Food Court will be updated and modified to increase food preparation and patron efficiency.

Construction will take place during the summer of 2012.

Question, comments, concerns?

Design representative: Jeff Kasdorf, kasdorf@pplant.msu.edu, 517-353-5141
Construction Representative: Tony Rhodes, rhanhem@pplant.msu.edu, 517-432-7104
Hannah Administration Building – North Entrance Renovation
August 2012
Main entrance with new steps
New handicap accessible ramp
New approach with snow melt system
New approach with added bicycle loops
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Construction Junctions continue monthly

Meetings are at 8:30 a.m. the second Thursday of the month

Fall meetings move to Room 112 Brody Hall

• September 13
• October 11
• November 8

Please sign in and take a survey before you go!